

Do It Yourself: Visual Indicators, Stick Test, and Jar Test for Cyanobacteria (Blue-Green Algae) Bloom

Visual Indicators:

While various cyanobacteria species can look and behave differently, there are a few common visual indicators of a cyanobacterial bloom, including:

- a resemblance to paint or pea soup
- a scum may form on the water's surface or along the shoreline
- small particles or patches are common, which are generally green or blue-green (but can be other colors)

Typically, cyanobacteria blooms are not yellow in color (that is more likely pollen) nor long stringy strands. Keep in mind that while informative, this test is not 100% accurate for all types of cyanobacteria, so you should continue to be cautious until receiving a lab confirmation that the bloom is not a toxin-producing species.

DIY Stick Test Steps:

1. With appropriate precautions (i.e., gloves & mask).
2. Use a sturdy stick or rake/shovel handle to lift the plant/scum out of the water.
3. If the stick appears to have a coating of paint on it, it is likely cyanobacteria (Figure 1).
4. If the stick lifts out strands of material, which may resemble hair, it's more likely filamentous algae or other type of aquatic plant (Figure 2).
5. If the stick appears clean, results are inconclusive.



Figure 1



Figure 2

Figure 1 = Stick test showing cyanobacteria covering paddle.

Figure 2 = Stick test showing non-cyanobacteria aquatic plant growth.

DIY Jar Test Steps:

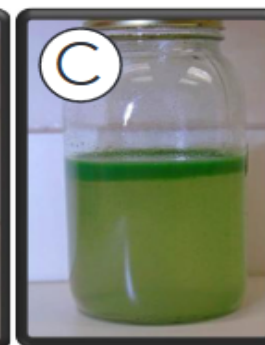
1. With appropriate precautions (i.e., gloves & mask), collect a sample of the water and algae in a clear plastic or glass container (either a pickle or peanut butter jar work well). Be sure to leave some air space at the top of the bottle – only fill the container about three-quarters full. Place the cap on the container (Figure A).
2. Move the sample to a cool, dark location where it can remain undisturbed for 8-16 hours, although positive results may appear more quickly. Use either a cooler or refrigerator for sample storage. If using a refrigerator that may also contain food for human consumption, place the bottle in a clean, sealed plastic bag (e.g., Ziploc) to avoid the potential for contamination of food.
3. After the waiting period, view the sample – without moving it!
4. If the algae are settled out near the bottom of the jar, then that is likely indication that the lake does not have a lot of blue-green algae growing in it (Figure B).
5. If, instead, the algae have formed a green ring around the top of the water in the jar, it is likely cyanobacteria (Figure C).
6. If the sample remains well-mixed, it may not be cyanobacteria (Figure A).
7. After the test is complete, jar contents can be poured onto a surface outdoors, where it can soak into the ground.



Initial Water
Sample Taken



Negative For
Blue-Green Algae



Positive For
Blue-Green Algae

If your lake experiences a suspected cyanobacteria bloom, limit contact with the water until it is confirmed as safe. The most accurate way to determine if a bloom is cyanobacteria or a type of algae is to submit a [report online](#), or call the [Spills Action Centre](#) 24 hours a day, 7 days a week: Toll-free: **1-866-MOE-TIPS (663-8477)**